
Solar Workforce Development



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Building a Training Program



- Why Build a Local Training Program for Solar Installers
- Where Are Good Locations for a PV Training Center
- Who Are Good Candidates for Trainers
- What Training Materials and Equipment Are Required

Why Build a Local Training Center for Solar Installers



- Increasing local employment is key to a strong local economy
- Consumers trust local contractors over out-of-state contractors they may never see again
- States may provide funding for programs that create jobs in local communities
- By learning about solar installation practices from a local institution, students will learn what specific issues apply to that area. For example
 - Who is the utility?
 - Is wind loading an issue?
 - Are there special requirements for installing systems on historic buildings?

Where to Locate a Training Center?



- Required for a Training Facility
 - Classroom Space
 - Laboratory Space
 - Proper Electrical Equipment
- Community College Campus
- Technical Colleges
- Electrical Training Centers
- Plumbing Training Centers

What training materials are required?



- Course materials should be created with the help of an Instructional Designer
- Course materials should include both classroom activities (cognitive) and laboratory activities (psychomotor)
- Course times range from several days up to several weeks
- Course should focus on all aspects of the business of being an installer including

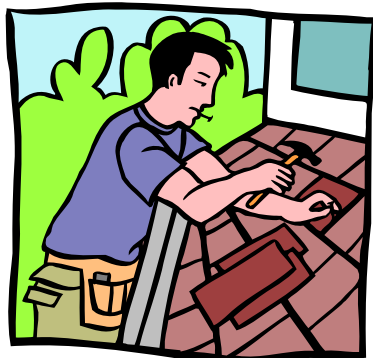
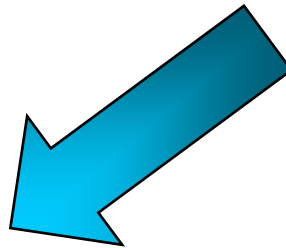
The PV Installation Process



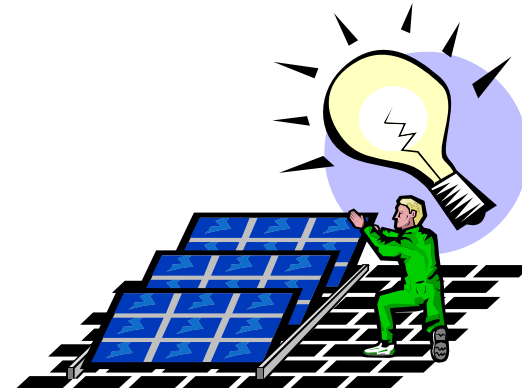
Conducting a Site Survey



Selecting a System



Installing the System



System Checkout & Inspection

Site Survey



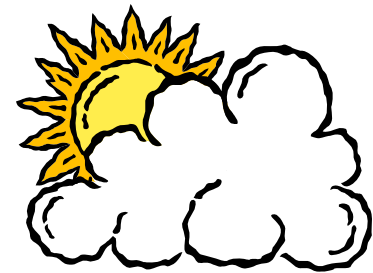
Put PV Here



**Permits, Utility
Interconnection
Agreement, Rebates**

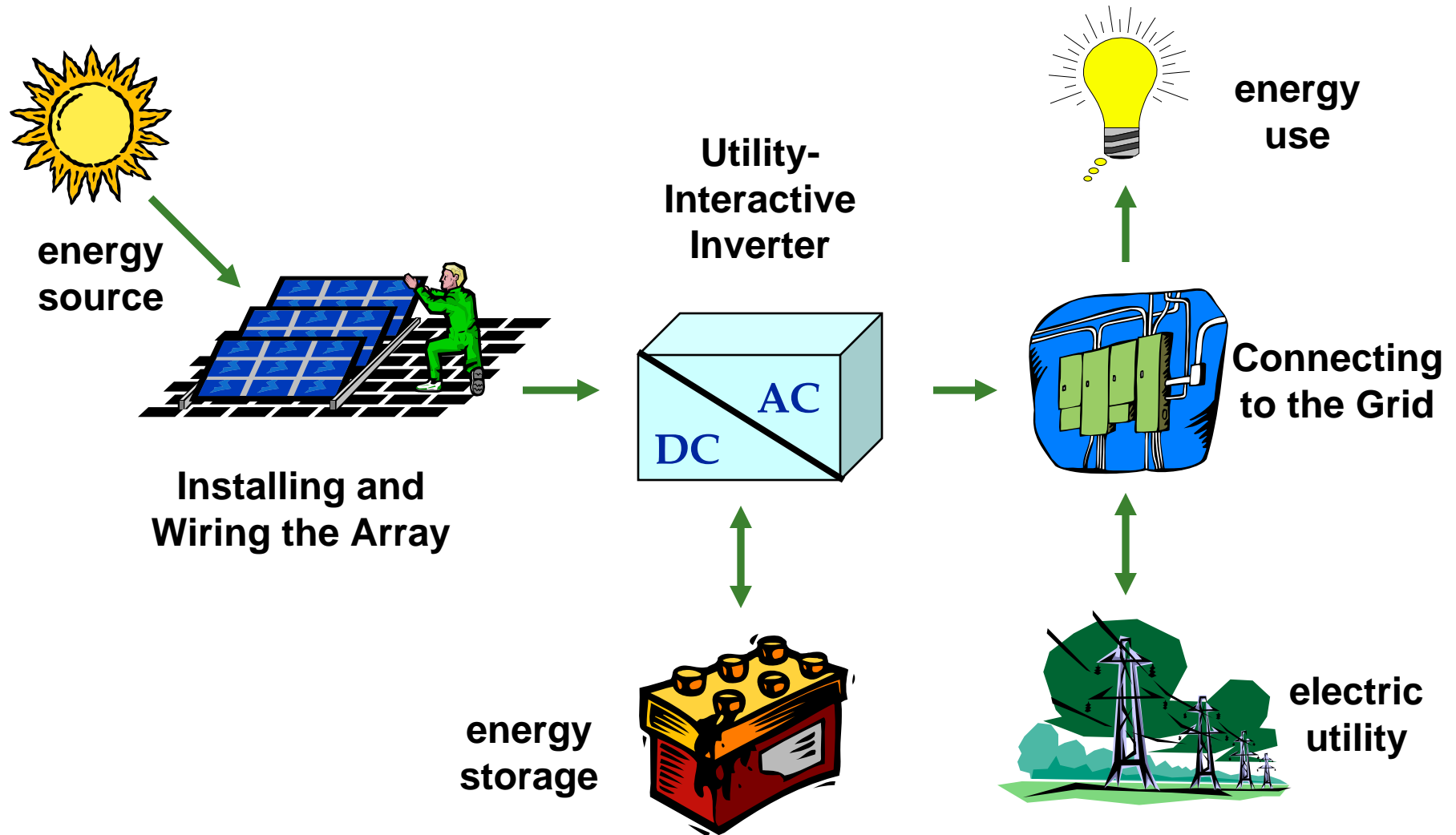


**System Placement &
Shading**

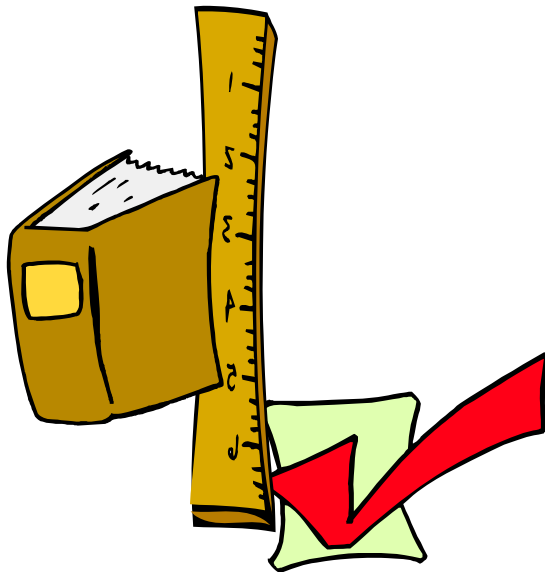


**Solar Resource
Assessment
and
Energy Estimation**

Installing the System



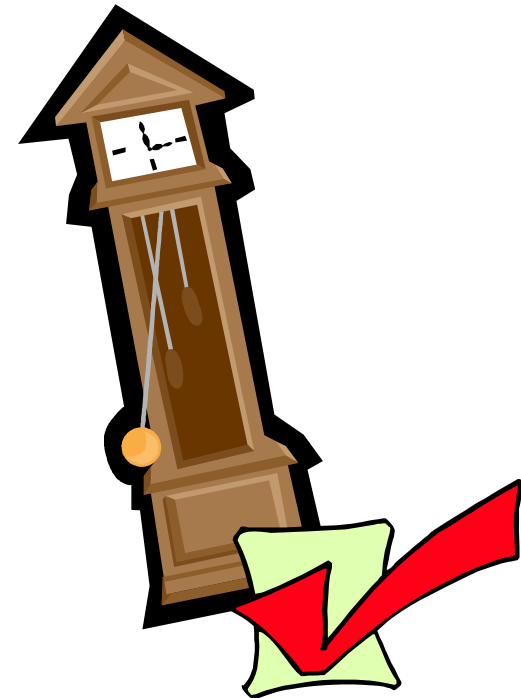
System Checkout



Verify Code Compliance



Verify Performance



**Ensure Long-Term
Operation**

What equipment is required?



- Four laboratories
 - Module IV Curve
 - Installing the PV system on a mock-up roof
 - Inverter testing
 - Learning about batteries

Tools and directions for mounting PV systems on mock-up rooftops.



Installing Module Racking on a Rooftop



Mock-Up Roof to Install PV Modules



Equipment: Inverters Mounted on Portable Carts



Inverter Laboratory



PV Array for Laboratory

